E. GILLETT.

EXTENSIBLE CRUTCH.

APPLICATION FILED NOV. 16, 1917.

1,285,120. Patented Nov. 19, 1918.

Fig. 6.

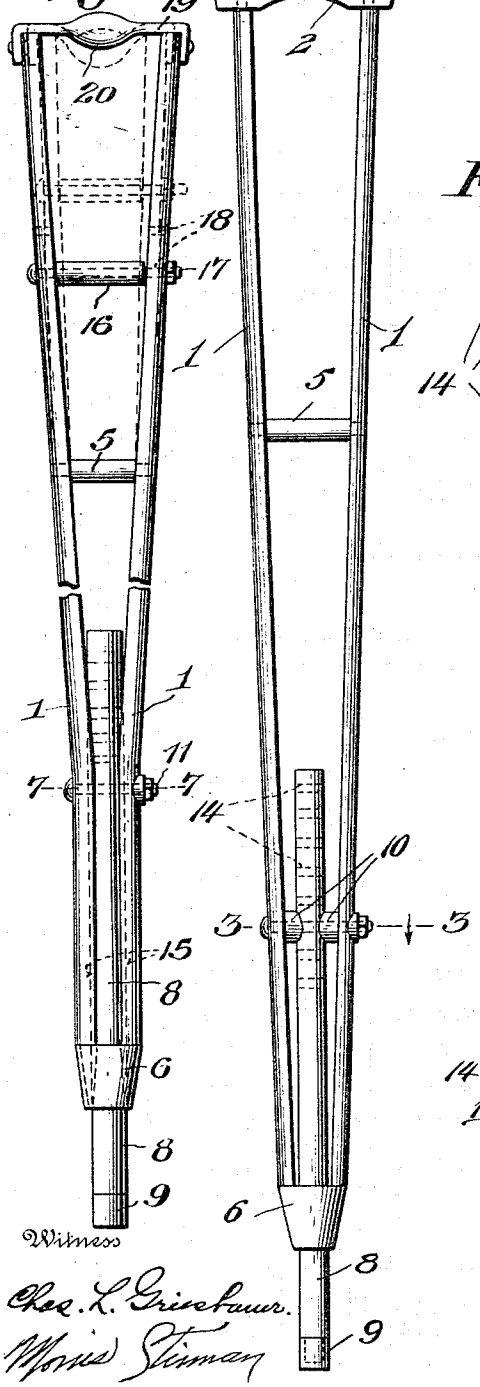


Fig. 1.

Fig. 7.

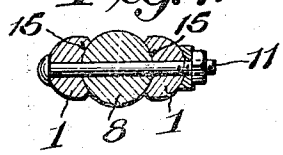


Fig. 2.

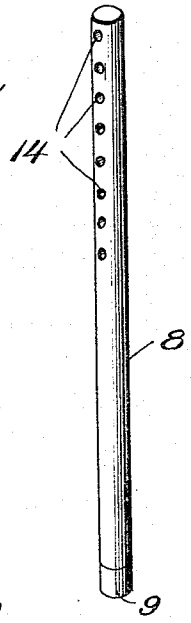


Fig. 4.

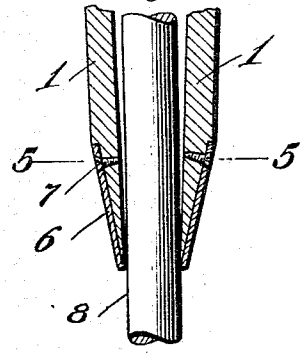


Fig. 5.

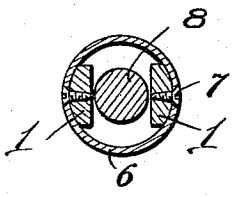
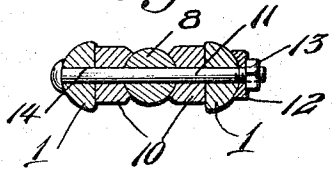


Fig. 3.



Witness

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EXTENSIBLE CRUTCH.

1,285,120. Specification of Letters Patent. **Patented Nov. 19, 1918.**

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To all whom it may concern:

Be it known that I, EUGENE GILLETT, a citizen of the United States, residing at Long Beach, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Extensible Crutches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to extensible crutches and more particularly to that type of crutch in which the footpiece is made adjustable for people of various heights.

More specifically my invention resides in providing a device of this character, composed of the least number of parts, which may be quickly adjusted when the occasion arises and which is adapted to withstand the heavy duty to which it is subjected.

Another object of my invention is to provide a construction in which the brace ends are compactly and securely held in position and are adapted to slidingly receive a foot-piece.

Another object of my invention is to provide a construction in which the foot-piece is firmly held in any adjusted position between the two braces.

A still further object of my invention is to provide a simple means for assembling the braces and foot-piece and which provides a quick, strong, and convenient adjustable connection.

And still another object of my invention is to provide an improved arm rest, which may be adjusted to fit the armpit thereby eliminating the usual chafing and soreness common to the use of crutches.

The invention will be readily understood from an inspection of the accompanying drawing and from the following detailed description of the construction illustrated therein.

In the drawing, Figure 1 is a side elevation of my improved crutch; Fig. 2 is an elevation of the foot-piece showing the adjusting holes; Fig. 3 is a section on line 3—3 of Fig. 1; Fig. 4 is a section showing the ferrule into which the two braces are received and illustrating the manner in which the footpiece passes therethrough; Fig. 5 is a section taken on line 5—5 of Fig. 4; Fig. 6 is a modification of the crutch and Fig. 7 is a section on line 7—7 thereof.

In the drawing the improved crutch is shown as composed of two braces 1 of suitable material and attached in any preferred manner to the arm rest 2 which is shown as having a central hump 3 and two depressions 4 for the reception of the two corresponding cords of the underarm. It is obvious that any type of arm piece may be used if desired. Centrally, the two braces are provided with the usual hand-hold 5 which may or may not be adjustable in any approved way, as by a series of perforations in the braces and a bolt to pass through the hand-hold.

The lower beveled ends of the braces 1 are brought together and held within a metal ferrule 6 by means of small screws or other fasteners 7, the space between the braces within the ferrule being of a suitable diameter to slidably receive a foot-piece 8, as shown in Fig. 5.

This foot-piece 8 is provided at its extreme lower end with a metal tip 9 while the upper half is provided with a series of spaced bolt-holes 14, any desired one of which is adapted to receive a bolt 11 passing through holes in the braces 1. In order to secure the braces and foot-piece firmly in position there are provided two washers 10 of any suitable material also perforated to receive the bolt 11 and the inner surface of these washers is curved or provided with any adaptable contour to enable them to snugly fit between the foot-piece and the braces. The braces, foot-piece and washers are held in position by the bolt 11, clamping washers 12 and nut 13.

In lieu of holding the foot-piece as in Fig. 1 a construction like that shown in Fig. 6 may be resorted to, in which the braces 1 are grooved as at 15 to slidingly receive the upper portion of the foot-piece 8 which may be held in adjusted position as by the nut and bolt shown therein. If necessary spacing washers may be used as in Fig. 1.

My preferred form of arm rest comprises a strap 19 of more or less flexible material such as leather, attached to the top of the braces 1 and provided with a centrally located hump, herein shown as a padded ball 20 of oblong or other form secured to the strap in any desired way. In order to make the arm rest adjustable to people of different weights means is provided to permit said flexible means to sag or to render the same taut as the occasion demands.

One such means consists in compressing the natural spring of the braces 1 by means of a bolt 17 adapted to pass through a sleeve 16 located between the braces, so that by means of the different adjustments the strap 19 is made taut as when it is to be used by a heavy person or the strap 19 is sagged by compressing the outer ends of the braces by the adjusting means when for use by a lighter person.

It will be noted that in use the padded ball will rest in the arm pit and that the weight of the user will cause said strap to sag and form depressions in the strap on each side of the ball to receive the cords of the under arm.

Having thus described my invention what I claim and desire to secure by Letters Patent is:—

1. In an extensible crutch, braces which diverge toward their upper ends, an arm-rest connecting said divergent ends, a ferrule inclosing the lower ends of said braces and secured thereto, a foot-piece disposed between said braces and slidably projecting through said ferrule, said foot-piece having a series of spaced bolt-holes therethrough and a single bolt passing through said braces and foot-piece and firmly securing them together, whereby said foot-piece may be adjusted and secured at any one of a plurality of adjustable positions longitudinally of said braces.

2. A crutch having a foot-piece and braces extending therefrom and diverging toward their upper ends, the upper portions of said braces being resilient and adapted to readily yield to pressure tending to draw them together, a flexible arm-rest connecting the free ends of said braces, and an adjusting device whereby the divergent ends of said braces may be drawn toward each other or forced apart, to vary the tension of said arm-rest, and the parts firmly secured in adjusted position.

3. An extensible crutch comprising divergent braces having an arm-rest on their divergent ends and their lower ends spaced apart and seated in a ferrule to which they are secured, a foot-piece extending through said ferrule between said braces and slidable therein, said foot-piece having a series of bolt-holes therein, and a fastening bolt passing through both braces and foot-piece and adjustably securing them together.

In testimony whereof I affix my signature in the presence of two witnesses.

EUGENE GILLETT.

Witnesses:
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LOUISE VAN OSDEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."